Alternatives Analysis Technical Report
Appendix H: LIMITED ENVIRONMENTAL SITE ASSESSMENT

Red Line/Blue Line Connector Project

Boston,
Massachusetts

Massachusetts Department of Transportation
Boston, Massachusetts

March 2010

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1

Limited Environmental Site Assessment

1.1 Introduction

TRC Environmental Corporation (TRC) prepared this Limited Environmental Site Assessment Report for the Massachusetts Department of Transportation (MassDOT) and STV Incorporated (STV) in accordance with the signed contract, dated June 15, 2009. The limited environmental site assessment was conducted to evaluate existing environmental conditions which have the potential to impact the design and construction of the Red Line/Blue Line Connector Project (the Project). The Project Corridor is an MBTA Right-of-Way located along Cambridge Street situated between Charles/MGH Station and Bowdoin Station and between Bowdoin Station and Government Center Station. A Site Location Map, depicting the approximate boundaries of the Project Corridor, is provided as Figure 1 (Attachment A).

The limited environmental site assessment was conducted at street level within and adjacent to the Red Line/Blue Line Expansion Project Corridor.

This Limited Environmental Site Assessment Report documents the findings of the Limited Environmental Site Assessment performed by TRC in August and September of 2009.

1.1.1 Statement of Purpose

The objectives of this Limited Environmental Site Assessment Report are to document known environmental conditions located within and around the Project Corridor. This effort included the following:

- Evaluate documented soil and groundwater contamination within, adjacent to, or surrounding the Project Corridor.

- Determine if any Massachusetts Contingency Plan (MCP) release sites and/or environmental deed restrictions (called Activity and Use Limitations, or "AULs") could impact work at the Project by requiring or restricting specific construction activities.

- Outline possible MCP issues that could impact construction schedule, health and safety obligations, or soil and groundwater management during construction.

This report shall document existing known environmental conditions in and around the Project Corridor, provide recommendations for additional assessment (if necessary), and support the preparation of contractor bid packages.

1.1.2 Scope of Services

The limited environmental site assessment consisted of a review of environmental databases, review of historical Sanborn fire insurance maps, review of historical aerials photographs, a Massachusetts Department of Environmental Protection (MassDEP) file review, and street level site reconnaissance to evaluate existing environmental conditions which have the potential to impact the design and construction within the Project Corridor.

The findings of the limited environmental site assessment are summarized in Section 1.4 and the recommendations and considerations are presented in Section 1.5.

1.1.3 Limitations

Findings presented within this report are representative only of documented existing conditions along the Project Corridor as of the date of the assessment. This assessment did not include the installation of environmental test borings/monitoring wells or collection of analytical samples to confirm the presence or absence of soil and groundwater contamination along the Project Corridor.

1.2 Description of Project Corridor

The Red Line-Blue Line Project Corridor is an MBTA Right-of-Way located along Cambridge Street in downtown Boston, Massachusetts, situated between Charles/MGH Station and Bowdoin Station and between Bowdoin Station and Government Center Station.

The Project Corridor is approximately 0.6 miles in length and consists of various areas including railway stations, tunnels, mechanical rooms, and electrical closets totaling approximately 383,000 square feet of space. A *Site Location Map*, identifying the general vicinity of the Project Corridor, is provided as Figure 1 (Attachment A), and *Site Plans,* depicting known soil and groundwater contamination along the Project Corridor, are provided as Figures 2 and 3 (Attachment A).

1.3 Site Assessment Activities

The following environmental site assessment activities were conducted along the Project Corridor:

1.3.1 Review of Environmental Databases

TRC purchased a commercially available environmental database search report from Environmental Data Resources, Inc. (EDR) and reviewed MassDEP's online spills and reporting database. Information from these environmental databases was compiled and produced over 400 MCP disposal sites located on, adjacent to, and in the vicinity of the Project. The majority of these 400 disposal sites are not considered to represent a significant concern to the Project based on distance, hydrogeology, type and extent of contamination, and/or current regulatory status. A copy of the EDR database report is provided in Attachment C.

Based on distance and release type, the 400+ MCP disposal sites identified were further sorted to generate a list of the 34 closest known MCP disposal sites with potential to impact subsurface conditions within the Project Corridor. Many of these 34 MCP disposal sites are presumed to be located hydrogeologically down-gradient of the Project and/or are associated with releases unlikely to impact subsurface conditions within the Project Corridor. Accordingly, TRC has designated these MCP disposal sites as having a "low" probability of impacting the Project Corridor. The locations of these MCP disposal sites are shown on Figures 2 and 3 in Attachment A. A table summarizing the release histories and regulatory statuses of these MCP disposal sites is provided in Attachment B.

There are numerous historical releases of oil and gasoline in the immediate vicinity of the Project Corridor. While most of these MCP disposal sites have been closed under the MCP, there is limited information available to determine if and/or how much soil and groundwater contamination still exists in the subsurface. These historical releases were determined to have a "moderate" potential of environmentally impacting subsurface conditions within the Project Corridor due to this uncertainty. The locations of these MCP disposal sites are shown on Figures 2 and 3 in Attachment A. Further discussion of the release histories and regulatory statuses of these MCP disposal sites is provided in Section 1.4 and on the table provided in Attachment B.

TRC identified a total of three MCP disposal sites that have a "high" potential of environmentally impacting subsurface conditions within the Project Corridor. These sites are located immediately adjacent to, up-gradient of, or within the Project limits of work, and are depicted on Figures 2 and 3 in Attachment A. Further discussion of the release histories and regulatory statuses of these three MCP disposal sites is provided in Section 1.4 and on the table provided in Attachment B.

1.3.2 Review of Historical Boston City Atlases

City atlases were initially produced to provide visual representations of land uses, building occupants, and property owners. Like Sanborn® Fire Insurance Maps, city atlases may be used when evaluating potential for past releases in an area as a result of historic land uses. TRC reviewed historical city atlases for the City of Boston for information regarding former occupants from within the boundaries of the Project Corridor and surrounding properties. City atlases for the years 1890 and 1938 were obtained for review and are summarized below.

TRC's review of city atlases dated 1890 identified street level areas in and immediately surrounding the Project Corridor as densely developed and primarily occupied by residential, commercial, and institutional buildings including hotels, retail shops, banks, realty companies, schools, churches, and hospitals. Remaining areas within the Project Corridor are depicted as being developed with paved roads, access drives, and parking lots.

A review of the 1938 city atlases revealed similar conditions to those depicted on the 1890 atlases, with the exception that multiple facilities of potential environmental concern, including heating oil companies and automobile repair garages, occupied various areas within the Project Corridor along Cambridge Street. Photocopies of city atlases reviewed are included in Attachment D.

1.3.3 Review of Historical Aerial Photographs

Historical aerial photographs are used to interpret and evaluate changes in land use and visible areas of potential environmental concern at the Site and surrounding areas. A search for historical aerial photographs depicting the area of the Project Corridor was conducted by EDR. Aerial photographs for the years 1938, 1946, 1955, 1960, 1969, 1978, 1980, 1985, and 1995 were obtained for review and are summarized below.

Conditions depicted in all photographs reviewed are generally similar to those observed during the site reconnaissance. Street level areas within the Project Corridor and in immediately surrounding areas appear densely developed with commercial and residential buildings, paved roads, access drives, and parking lots. Photocopies of aerial photographs reviewed are included in Attachment D.

1.3.4 Review of MassDEP Files

Based on the review of the environmental databases, TRC visited the MassDEP Northeast Regional Office to gather additional information pertaining to MCP disposal sites which have a likelihood of environmentally impacting the Project Corridor. Data collected at MassDEP summarizing nearby MCP disposal sites has been tabulated and is included in the information provided in Attachment B. A discussion of release histories and regulatory statuses associated with the three MCP disposal sites of highest environmental concern is provided in Section 1.4. Photocopies of select environmental reports reviewed at MassDEP are included in Attachment E.

1.3.5 Site Reconnaissance

TRC conducted a street level site reconnaissance of the Project Corridor on August 19, 2009 to evaluate environmental conditions which could impact the planning and scheduling of the Project. TRC was also able to confirm the locations of identified MCP disposal sites along the Project Corridor and in the surrounding areas.

During the site reconnaissance, TRC did not observe any existing site conditions that would pose an immediate environmental concern to the Project. Photographs taken during TRC's reconnaissance are provided in Attachment F.

1.4 Findings

1.4.1 Charles/MGH Red Line Station / RTN 3-21624

In April 2002, MassDEP was notified of a release of extractable petroleum hydrocarbons (EPH) and lead to soil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP indicating that a permanent solution has been achieved in accordance with the MCP, but that contamination (EPH, polycyclic aromatic hydrocarbons [PAHs], and lead) has not been reduced to background levels. Potential exists for Project construction workers to be exposed to soil associated with this MCP disposal site.

According to regulatory files, approximately 95,480 square feet of contaminated soil lies within the Project's limit of work boundaries (See Map ID No. 1 on Figure 2 of Attachment A, and the table in Attachment B). Residual EPH, PAH, and lead soil contamination around the Charles St/MGH Red Line Station warrants pre-characterization of soil and groundwater. Pre-characterization should be completed prior to construction to evaluate potential soil and groundwater management/disposal options and regulatory requirements.

1.4.2 19 Staniford Street / RTN 3-15720

In November 1997, MassDEP was notified of a release of diesel fuel from a 550-gallon UST which occurred at 19 Staniford Street and issued RTN 3-15720. Following response actions, a Class B-1 RAO Statement was submitted to MassDEP. A Class B-1 RAO Statement implies that residual contamination equals background levels. The report stated that the release appears to have been confined to subsurface soil and groundwater in the immediate vicinity of the closed UST. Soil and groundwater contamination still exists within the MCP disposal site boundary.

The MCP disposal site at 19 Staniford Street consists of approximately 876 square feet of space; all of which lies within the Project's limit of work (See Map ID No. 2 on Figure 3 of Attachment A, and the table in Attachment B). While this MCP disposal site is closed with a Class B-1 RAO, the background levels references are believed to include contaminated soils and groundwater from surrounding sites. Currently there is no exposure risk so the Class B-1 RAO is appropriate for the disposal site; however if construction activity modify existing conditions contaminated soils likely will be encountered. The documented soil and groundwater contamination within the MCP disposal site boundary warrants pre-characterization of soil and groundwater. Pre-characterization should be completed prior to construction to evaluate potential soil and groundwater management/disposal options and regulatory requirements.

1.4.3 1,2,4 Strong Place / RTN 3-12300

In March 1995, MassDEP was notified of evidence of a release of No. 2 fuel oil to groundwater from an unidentified source, which resulted in approximately two inches of light non-aqueous phase liquid (NAPL) on the groundwater table. Disposal site representatives filed for a Down-gradient Property Status (DPS) under the MCP asserting that an up-gradient property was responsible for the oil contamination at the property. Oral approval was received from MassDEP to complete an Immediate Response Action (IRA), and a status or interim report was submitted to MassDEP in October 1996.

In November 1998, MassDEP was notified of a release of No. 2 fuel oil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP.

The limits of the MCP disposal site are defined and are directly adjacent to the Project limits of work. The disposal site boundary associated with this release is depicted on Figure 2 of Attachment A, and the table in Attachment B.

This is an active up-gradient MCP disposal site where soil and groundwater contamination still exists (including NAPL) within the MCP disposal site boundary. A Release Abatement Measure (RAM) may be needed if the construction activities extended into this MCP disposal site boundary. The known soil and groundwater contamination within the MCP disposal site boundary warrants pre-characterization of soil and groundwater. Pre-characterization should be completed prior to construction to evaluate potential soil and groundwater management/disposal options and regulatory requirements.

1.4.4 History of Adjacent Petroleum Use and Releases

There are numerous historical releases of oil and gasoline in the immediate vicinity of the Project Corridor along Cambridge Street between Lindall Place and Joy Street. While most of these MCP disposal sites have been closed under the MCP (and, therefore, ranked "moderate" on the table in Attachment B); there is limited information available to determine if and/or how much soil and groundwater contamination still exists adjacent to the Project Corridor. The locations of the disposal sites are depicted on Figures 2 and 3 of Attachment A

As discussed in Section 1.3.2, city atlases reviewed for this assessment depicted multiple facilities of potential environmental concern historically existing adjacent to the Project Corridor. These facilities include heating oil companies and automobile repair garages. Although documented releases associated with these facilities were not identified, undocumented releases of petroleum are likely to have occurred at

these locations due to the fact that few regulations existed pertaining to spill prevention, leak detection, and reporting during the period of historic facility operations. As such, undocumented petroleum releases are likely to have occurred at these locations and may still be present.

The uncertainty surrounding the condition of soil and/or groundwater along the Project Corridor warrants pre-characterization of soil and groundwater along Cambridge Street between Lindall Place and Joy Street. Pre-characterization should be completed prior to construction to evaluate potential soil and groundwater management/disposal options and regulatory requirements.

1.5 Conclusions and Recommendations

Based on known soil and groundwater contamination existing within and adjacent to the Project Corridor, TRC recommends the following:

1.5.1 Soil and Groundwater Pre-Characterization Program

Due to the known soil and groundwater contamination adjacent to the Project Corridor, TRC recommends an environmental soil and groundwater pre-characterization program be conducted. This program should include the advancement of test borings, collection of analytical soil samples, the installation of monitoring wells and the collection of analytical groundwater samples within the Project Corridor at the locations of proposed excavation and around the areas identified in Section 1.4.

Analytical results can be used to confirm the presence or absence of contamination. In addition, the data can be used to develop a Soil and Groundwater Management Plan and disposal scenarios and costs prior to sending out the bid package.

Based on the results of the soil and groundwater pre-characterization program, Project construction may ultimately require additional subsurface investigation to satisfy any MCP notifications/submittals that may be required and/or obtain disposal characterization information.

This soil and groundwater pre-characterization program should be performed as part of the preliminary and final design process.

1.5.2 Other Environmental Considerations

Petroleum and hazardous contaminants may be encountered during this Project that were not identified during this Limited Environmental Site Assessment. The discovery of new environmental conditions may require new MCP reporting to the MassDEP, additional site assessment activities, remediation activities, and/or MCP compliance activities during the Project. These MCP requirements could adversely impact construction schedules if conducted close to the start of the construction project. Due to this concern, TRC recommends characterizing soil and groundwater quality before the beginning of construction activity which involves soil excavation and groundwater management.

1.5.3 MCP Disposal Site & Activity Use Limitations Guidance

TRC's review of environmental databases and MassDEP files indicates that no MCP disposal sites subject to environmental deed restrictions or Activity Use Limitations (AULs) located within or adjacent to the Project Corridor. There are no active (open) MCP disposal sites within the Project Corridor. One active MCP disposal site exists adjacent to the Project Corridor at 1,2,4 Strong Place (RTN 3-12300).

The MassDEP MCP Sites Database should be reviewed immediately prior to the start of construction to confirm there are no new active MCP disposal sites, Class C RAO sites, A-3 RAO sites, or AUL sites within the Project Corridor.

In the event that Project construction occurs on active MCP disposal site(s) or on closed MCP disposal sites with a Class C RAO or an A-3 RAO (with an AUL), construction activities must be performed in accordance with the MCP, possibly including:

a.) MCP Notification to Property Owners prior to collection of soil or groundwater samples on their property.

b.) Release Abatement Measure, or "RAM" Plan (for excavation of soil or removal of groundwater within former MCP site boundaries). RAM Status Report(s) and RAM Completion Report.

c.) MCP Phase II Extension and Tier Permit Transfer.

d.) Work will need to be conducted by OSHA HAZWOPER-trained workers using a site specific Health and Safety Plan (HASP).

However, at the present time, there are only closed MCP sites within the Project Corridor and a RAM Plan will not be needed. If the project excavation does not take place in 2010, then MCP release sites should be re-evaluated along the Project Corridor

1.5.4 Soil Management Guidance

It is likely that contaminated soil will be uncovered during this project. A Soil Management Plan should be prepared as part of the 30% and Final design process that will guide workers with the proper soil management and disposal activities. The management plan will reduce project delays and disposal costs by outlining appropriate soil management procedures (i.e. segregating contaminated soil from "clean" soil), potentially reducing project costs.

If contaminated soil is observed during construction (due to strong odors, oily soils, or other evidence of contamination), then the contractor must contact STV/TRC to determine if additional environmental reporting, health and safety plans, or other actions are required. Contaminated soil must be segregated from "clean" soil by placing the contaminated soil on plastic sheeting or in roll offs, and covered by plastic sheeting. Soil can be replaced in the excavations, but contaminated soil should be removed from the site or placed in the excavations at the general depths from which it came. Any excess soil that needs to be shipped off the project site will need shipping papers prior to transporting the soil from the property (contact TRC for additional information). Work within contaminated areas will require additional steps for soil management, soil disposal, MCP documentation, and worker training (OSHA HAZWOPER training).

1.5.5 Groundwater Management Guidance

A Groundwater Management Plan should be prepared as part of the 30% and Final design process that will guide workers with the proper groundwater management and treatment/disposal activities. If groundwater is not contaminated during dewatering activities; groundwater can be discharged to the ground in accordance with MassDEP Best Management Practices (BMPs). If contaminated groundwater is encountered during construction (such as oil on the water in any test pit), the contractor must contact STV/TRC immediately as there could be MCP reporting requirements and additional environmental steps that will need to be taken. Oily water cannot be pumped off to a storm drain, to the ground, or to surface water. Contaminated groundwater will need to be containerized and then the water will be sampled to determine the proper treatment/disposal options. Groundwater can be shipped off-site using a Bill of Lading or hazardous waste manifest (signed by the generator [MassDOT]), discharged to surface water after first obtaining a USEPA Remediation General Permit, or discharged to the ground (in accordance with MCP requirements).

Attachment A

Figures

Approximate Site Boundary

N

0 1,000 2,000 Feet

MASSACHUSETTS

SITE LOCATION

Base map: USGS 7.5 Minute Topographic Quadrangles Boston North (1985) Boston South(1987)

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE LOCATION MAP

RED LINE / BLUE LINE CONNECTOR PROJECT BOSTON, MASSACHUSETTS

FIGURE 1	August 2009

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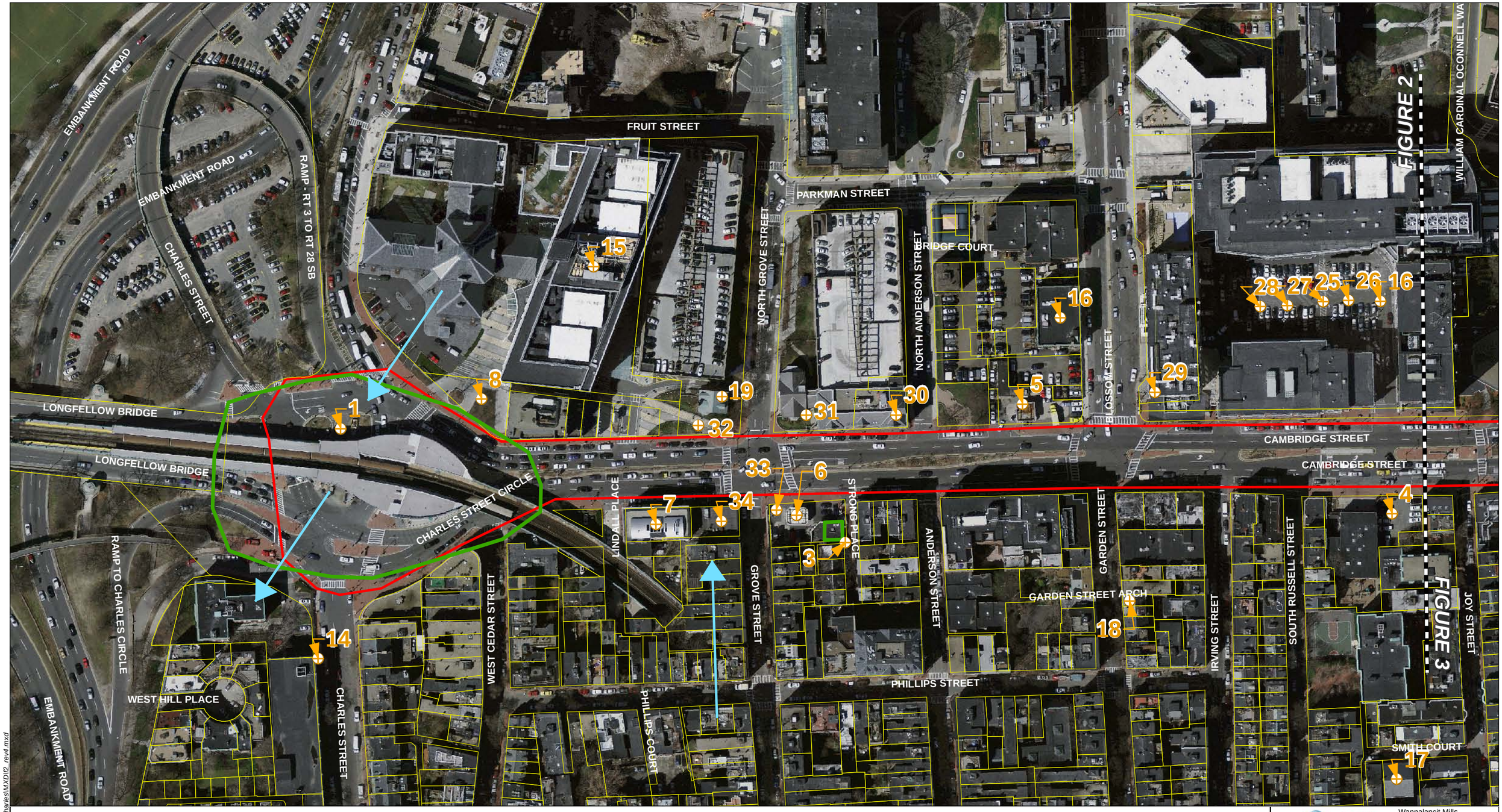

Approximate Limit of Work
Presumed Ground Water Flow
Approximate Location of Past Releases
Approximate Limits of Disposal Site Boundaries
Parcels
Match Line

0 100 200 Feet

N

Base map: 2008 Orthophoto, Parcels MASSGIS

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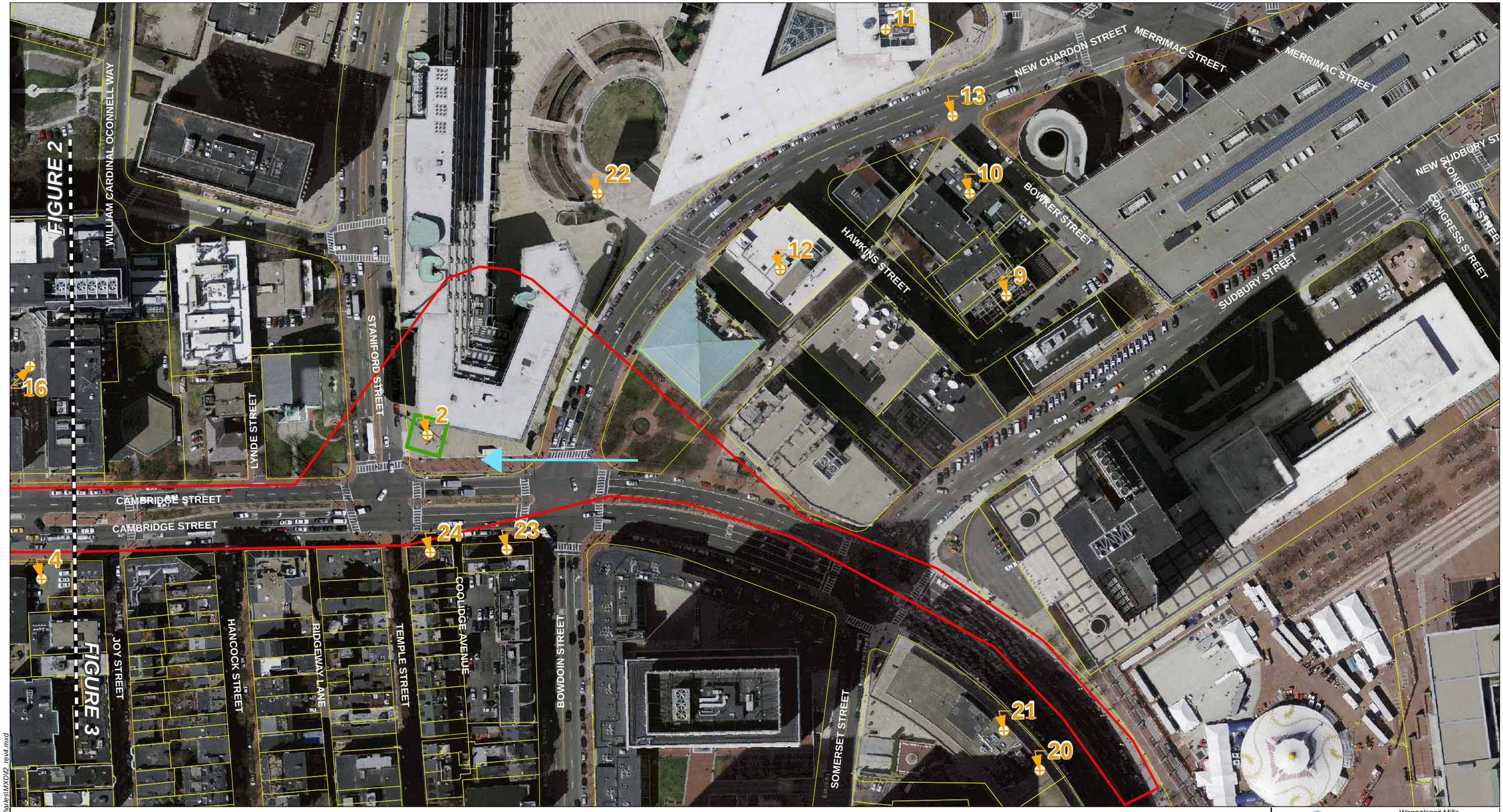
TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE PLAN

RED LINE / BLUE LINE CONNECTOR PROJECT BOSTON, MASSACHUSETTS

FIGURE 2	SEPTEMBER 2009



Approximate Limit of Work
Presumed Ground Water Flow
Approximate Location of Past Releases
Approximate Limits of Disposal Site Boundaries
Parcels
Match Line

0 100 200 Feet

Base map: 2008 Orthophoto, Parcels MASSGIS

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TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE PLAN

RED LINE / BLUE LINE CONNECTOR PROJECT BOSTON, MASSACHUSETTS

FIGURE 3	SEPTEMBER 2009

Attachment B

Surrounding Sites of Environmental Concern Summary Table

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Red Line / Blue Line Connector Project
Boston, Massachusetts

Surrounding Sites of Environmental Concern Summary Table

Map ID	Site Name	Address	Proximity& Hydrogeologic Setting Relative to the Site	Regulatory Status & RTN/Spill ID No.	Release Details	Probability of Environmentally Impacting the Site
1	**Charles CIR MGH Red Line Station**	Charles Street	Site	A-2 RAO 3-21624	In April 2002, MassDEP was notified of a release of EPH and lead to soil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP indicating that a permanent solution has been achieved in accordance with the MCP, but that contamination has not been reduced to background levels. Potential exists for Project construction workers to be exposed to soil associated with disposal site.	High
2	**Hurley Building**	19 Staniford Street	Site	B-1 RAO 3-15720	In November 1997, MassDEP was notified of a release of diesel fuel from a 550-gallon UST which occurred at the site. Following response actions which included the in-place closure of the UST system, a Class B-1 RAO Statement was submitted to MassDEP. The report indicates that the release appears to have been confined to subsurface soil and groundwater in the immediate vicinity of the closed UST. Potential exists for Project construction workers to be exposed to soil associated with disposal site.	High
3	**Residence**	1,2,4 Strong Place	85 feet south/upgradient	1. Status or Interim Report Received (Open) 3-12300 2. A-2 RAO 3-17489	1. In March 1995, MassDEP was notified of evidence of a release of No. 2 fuel oil to groundwater from an unidentified source, which resulted in approximately two inches of light non-aqueous phase liquid (NAPL) on the groundwater table. Disposal site representatives filed for a Downgradient Property Status (DPS) under the MCP asserting that an upgradient property was responsible for the oil contamination at the property. Oral approval was received from MassDEP to complete an Immediate Response Action (IRA), and a status or interim report was submitted to MassDEP in October 1996. The limits of the disposal site are defined and do encroach upon the Project limits of work. 2. In November 1998, MassDEP was notified of a release of No. 2 fuel oil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	High Moderate
4	**Engine 4**	200 Cambridge Street	35 feet south/upgradient	A-2 RAO 3-18850	In October 1999, MassDEP was notified of a release of EPH to soil which occurred at the site. Following Phase III investigations as defined in the MCP, a Class A-2 RAO Statement was submitted to MassDEP.	Moderate
5	**Gulf / Former Exxon Service Station**	239 Cambridge Street	Adjacent to the north/downgradient	1. RAO 3-4326 2. A-2 RAO 3-14911	1. In July 1993, MassDEP was notified of a release of an unknown quantity of an unknown chemical which occurred at the site. An RAO Statement of unreported class was subsequently submitted to MassDEP, indicating disposal site closure. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting soil boring and monitoring well locations, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work. 2. In March 1997, MassDEP was notified of a release of TPH and lead to soil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting soil boring and monitoring well locations, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work.	Moderate Moderate
6	**Sunoco Station / Grampy's Gas**	296 Cambridge Street	Adjacent to the south/upgradient	1. Closed N91-1340 2. A-2 RAO 3-11926	1. In September 1991, MassDEP was notified of a release of gasoline from a UST which occurred at the site. Regulatory closure was subsequently achieved. 2. In December 1994, MassDEP was notified of a release of gasoline to soil from a UST which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting locations of remedial excavations, soil sample collection points, and monitoring wells, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work.	Moderate Moderate
7	**Former Gasoline Station**	326 Cambridge Street	Adjacent to the south/upgradient	A-2 RAO 3-1805	In January 1989, MassDEP was notified of a release of an unknown chemical (presumably gasoline) which occurred at the site from a UST. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	Moderate
8	**Corner of Charles Street**	327 Cambridge Street	Adjacent to the north/downgradient	A-2 RAO 3-22677	In March 2003, MassDEP was notified of a release of oil to soil which occurred at the site. Following Phase II investigations as defined in the MCP, a Class A-2 RAO Statement was submitted to MassDEP.	Moderate
9	**Manhole**	29 Hawkins Street	380 feet northeast/downgradient	Closed N88-0434	In March 1988, MassDEP was notified of evidence of a release of No. 2 fuel oil from a nearby police station. Regulatory closure was subsequently achieved.	Low
10	**City Property**	43 Hawkins Street	480 feet northeast/downgradient	1. Closed N92-0371 2. Tier 1D (Open) 3-2737	1. In October 1988, MassDEP was notified of a release of No. 2 fuel oil from a UST which occurred at the site. Regulatory closure was subsequently achieved. 2. In October 1989, MassDEP was notified of a release of an unknown quantity of No. 2 fuel oil from a 5,000-gallon UST to a manhole. MassDEP files indicate that response actions pertaining to this release have not been performed. The site is currently classified as a Tier 1D disposal site, indicating that the responsible party (RP) has failed to provide a required submittal to MassDEP by a specified deadline.	Low Low

11	**Brooke Courthouse**	24 New Chardon Street	575 feet northeast/downgradient	1. Tier II (Open) 3-11346 2. Closed 3-11923	1. In August 1994, MassDEP was notified of a release of EPH compounds and metals which occurred at the site from an unknown source. The disposal site is tier classified and is currently undergoing remedial actions in accordance with the MCP and as outlined in the facility's Release Abatement Measure (RAM). The site is located presumably downgradient. 2. In December 1994, MassDEP was notified of a release of approximately 1,000 gallons of No. 2 fuel oil from a UST which occurred at the site. Following response actions, an IRA Completion Statement was submitted to MassDEP.	Low Low
12	**VFK Station Post Office**	25 New Chardon Street	230 feet northeast/downgradient	Closed N88-0955	In June 1988, MassDEP was notified of a release of hazardous materials which occurred at the site. Regulatory closure was subsequently achieved.	Low
13	**Bowker Street**	New Chardon Street	550 feet northeast/downgradient	URAM Completion Statement Received (Open) 3-21775	In May 2002, MassDEP was notified of a release of gasoline which occurred at the site from an unknown source. A Utility-related Abatement Measure (URAM) was performed to remediate site contamination and a URAM Completion Statement has been submitted to MassDEP. Disposal site closure is anticipated following MassDEP's review of site data and approval of level of site cleanup.	Low
14	**Mass Eye & Ear**	160 Charles Street	100 feet south/upgradient	RAO 3-122	In January 1987, MassDEP was notified of a release of an unknown quantity of an unknown chemical which occurred at the site. An RAO Statement of unreported class was subsequently submitted to MassDEP, indicating disposal site closure.	Low
15	**Mass General Hospital**	215 Charles Street	235 feet north/downgradient	A-2 RAO 3-4531	In July 1993, MassDEP was notified of a release of an unknown chemical which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	Low
16	**MA General Hospital**	16 Blossom Street	150 feet north/downgradient	Closed N92-0371	In March 1992, MassDEP was notified of a release of oil to soil which occurred at the site. Regulatory closure was subsequently achieved.	Low
17	**Boston African American National Historic Site**	8 Smith Court	400 feet south/upgradient	B-1 RAO 3-19022	In November 1999, MassDEP was notified of a release of EPH to soil which occurred at the site. Groundwater was not impacted. Following the completion of RAM activities, a Class B-1 RAO Statement was submitted to MassDEP.	Low
18	**Residence**	20 Garden Street	155 feet south/upgradient	A-2 RAO 3-22005	In August 2002, MassDEP was notified of a release of approximately 90 gallons of No. 2 fuel oil which occurred at the site. Following the completion of IRA activities, a Class A-2 RAO Statement was submitted to MassDEP.	Low
19	**Norwell / Residence**	6 N Grove Street	50 feet north/downgradient	1. Closed N88-1691 2. Closed N92-1438	1. In October 1988, MassDEP was notified of a release of approximately 10 gallons of gasoline to soil which occurred at the site. Regulatory closure was subsequently achieved. 2. In November 1992, MassDEP was notified of a release of No. 2 fuel oil which occurred in a residential basement. Regulatory closure was subsequently achieved.	Low Low
20	**Property**	52 Cambridge Street	70 feet south/upgradient	Closed N90-0345	In March 1990, MassDEP was notified of a release of approximately 100 gallons of methyl ethyl ketone (MEK) which occurred at the site. Regulatory closure was subsequently achieved.	Low
21	**Property**	60 Cambridge Street	70 feet south/upgradient	Closed N86-1263	In December 1986, MassDEP was notified of a release of an unknown quantity of oil which occurred at the site. Regulatory closure was subsequently achieved.	Low
22	**Property**	115 Cambridge Street	150 feet north/downgradient	1. Closed N89-1784 2. Waiver Completion Statement Permanent 3-3407	1. In January 1989, MassDEP was notified of a release of waste oil to soil from a UST which occurred at the site. Regulatory closure was subsequently achieved. 2. In January 1991, MassDEP was notified of a release of oil from a UST which occurred at the site. A Waiver Completion Statement was subsequently submitted to MassDEP.	Low Low
23	**Leo's Garage**	125 Cambridge Street	Adjacent to the south/upgradient	Closed N91-0712	In May 1991, MassDEP was notified of a release of an unknown quantity of No. 2 fuel oil to soil which occurred at the site. Regulatory closure was subsequently achieved.	Low
24	**Property**	128 Cambridge Street	Adjacent to the south/upgradient	Closed N87-0241	In February 1987, MassDEP was notified of a release of petroleum from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
25	**Charles River Plaza**	161-209 Cambridge Street	170 feet north/downgradient	A-2 RAO 3-22728	In March 2003, MassDEP was notified of a release of metals and PAHs to soil which occurred at the site. A Class A-2 RAO Statement was submitted to MassDEP.	Low
26	**Conrail Beacon Park Yard**	170 Cambridge Street	170 feet north/downgradient	A-1 RAO 3-11552	In August 1994, MassDEP was notified of a release of approximately 140 gallons of diesel fuel from a vehicle fuel tank which occurred at the site. Following immediate response activities, a Class A-1 RAO Statement was submitted to MassDEP.	Low
27	**Property**	183 Cambridge Street	170 feet north/downgradient	Closed N86-0669	In July 1986, MassDEP was notified of a release of approximately 10 gallons of oil which occurred at the site. Regulatory closure was subsequently achieved.	Low
28	**Boston Mazda**	201 Cambridge Street	170 feet north/downgradient	Closed N93-0077	In January 1993, MassDEP was notified of a release of an unknown quantity of waste hydraulic fluid which occurred at the site. Regulatory closure was subsequently achieved.	Low
29	**Property**	219 Cambridge Street	40 feet north/downgradient	1. Closed N89-0905 2. Closed N90-0940	1. In June 1989, MassDEP was notified of a release of approximately 50 gallons of gasoline which occurred at the site. Regulatory closure was subsequently achieved. 2. In June 1990, MassDEP was notified of a release of a release of gasoline to soil which occurred at the site. Regulatory closure was subsequently achieved.	Moderate Moderate
30	**Former Gasoline Station**	261 Cambridge	30 feet	Waiver Completion	In April 1989, MassDEP was notified of a release of petroleum which occurred at the site from a UST system. A Waiver Completion	Moderate

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		Street	north/downgradient	Statement Permanent 3-967	Statement was subsequently submitted to MassDEP.	
31	**Property**	293 Cambridge Street	30 feet north/downgradient	Closed N90-0697	In May 1990, MassDEP was notified of a release which occurred at the site that impacted approximately 100 cubic yards of soil with gasoline. Regulatory closure was subsequently achieved.	Moderate
32	**AST Leak**	297 Cambridge Street	30 feet north/downgradient	Closed N92-088	In January 1992, MassDEP was notified of a release of approximately 100 gallons of No. 2 fuel oil which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
33	**Property**	298 Cambridge Street	Adjacent to the south/upgradient	Closed N87-1633	In November 1987, MassDEP was notified of a gasoline release from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
34	**Property**	310 Cambridge Street	Adjacent to the south/upgradient	1. Closed N87-1454 2. Closed N88-1072 3. Closed N93-0847 4. Closed N92-1676	1. In October 1987, a release of an unknown quantity of oil occurred at the site. Regulatory closure was subsequently achieved. 2. In July 1988, MassDEP was notified of a release of an unknown quantity of paint which occurred at the site. Regulatory closure was subsequently achieved. 3. In June 1993, MassDEP was notified of a release of approximately 100 gallons of sodium hypochlorite which occurred at the site. Regulatory closure was subsequently achieved. 4. A release of an unknown material occurred at the site. Regulatory closure was subsequently achieved.	Moderate Moderate Moderate Moderate

Notes:
Class A-1 RAO Statements indicate that a permanent solution has been achieved in accordance with the MCP and contamination has been reduced to background levels.
Class A-2 RAO Statements indicate that a permanent solution has been achieved in accordance with the MCP, but that contamination has not been reduced to background levels.
Class B-1 RAO Statements indicate that remedial actions were not necessary because a condition of “No Significant Risk” exists.